

**REMARKS/ARGUMENTS**

This case has been carefully reviewed and analyzed in view of the Official Action dated 29 June 2005. Responsive to the objections and rejections to the Claims, the Independent Claim 1 has been carefully amended to emphasize the features which clearly distinguish the invention in question from the cited prior art.

In the Official Action, the Specification was objected to because of the found minor informality, particularly the word “lightguide” written as one word. Accordingly, the Specification, including the Title, the Background of the Invention, Summary of the Invention, Brief Description of the Drawings, Detailed Description of the Embodiments and the Abstract, have been corrected to rewrite the word “lightguide” as separate terms, i.e., --light guide--.

It is believed that by the corrections to the Specification, the objection to the disclosure is obviated; and the same is respectfully urged.

Claims 1 and 8 were objected to because the term “lightguide” was defined to be one word therein. Claims 1 and 8 accordingly have been amended to rewrite the word “lightguide” as separate terms. It is believed that the correction, required by the Examiner, overcomes the objection to the Claims; and the same is respectfully requested.

In the Official Action, Claims 5 and 7 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Accordingly, Claims

5 and 7 have been amended to overcome the 35 U.S.C. § 112, second paragraph, rejection; and the lift of this rejection from Claims 5 and 7 is respectfully requested.

In the Official Action, Claims 1-9 were rejected under 35 U.S.C. § 102(b) as being anticipated by Murase, et al., U.S. Patent #5,207,493.

Prior to consideration of the novel features separating the present invention from the Murase, et al. reference, it is believed that a brief description of the present invention is in order.

The present invention is a reflection-diffusion structure adapted for a light guide plate which includes, as best shown in Figs. 2-5, a box-like structure which has a receiving cavity 25 for receiving a light guide plate 20 and the light 24 therein. The reflection members 26 cover the edges of the box-like structure when the light guide plate 20 and the light 24 are received therein. The box-like structure is formed, as best shown in Figs. 3-5, from a rectangularly-shaped single piece foldable member which includes a portion 212 integrally connected along a side thereof to the portion 213, a portion 211 which is integrally connected to the portion 213, and the portion 214 integrally connected to the portion 211. When folded along the connecting sides of the portions 212, 213, 211, and 214, the rectangularly-shaped single piece foldable member forms a box-like structure with the receiving cavity 25 into which the light guide plate 20 and the light 24 can be slid.

The reflection members 26 are either integral or are attached to respective edges of the portion 212 or 211. When connected integrally to the edges, the reflection members 26 are folded to cover the openings of the receiving cavity 25 to contain the light therein.

An overlapping piece 215, best shown in Figs. 4 and 5, is integrally connected to a respective side of either the portion 212 or 214 to overlap another portion when the rectangularly-shaped member is folded into the box-like structure.

The portion 212 corresponds to a bottom wall, portion 213 corresponds to right wall, portion 211 corresponds to the top wall, and the portion 214 corresponds to the left wall of the box-like structure. These portions, as well as reflection members 26, are made from reflection materials. A top wall 211 of the box-like structure, includes a size adjustable diffusion area 22 made of the diffusion transparent material. Two portions 223 made of reflection material extend alongside the diffusion area 22.

The Murase, et al. Patent, cited by the Examiner, is an edge light panel which includes a front surface diffusion layer 27, an edge light panel 21, a light source 35, and a rear surface reflection layer 29.

The rear surface reflection layer 29 has the peripheral edge reflection layer 31 and the margin reflection layers 30 which are integrally formed by hot molding using a synthetic resin sheet. The peripheral edge reflection layers 31 are arranged along the edges 26 of the flat rear surface reflection layer 29 except the one juxtaposed with the primary light source 35 and perpendicular to the rear surface reflection layer 29 to a height slightly greater than the thickness of the edge light panel 21. The edge of the rear

surface reflection layer 29 which is juxtaposed with the light source 35, is extended outwardly and rounded inwardly in order to form a semi-circular cross-section and to define a primary light source reflection layer 32.

The front surface diffusion layer 27 of this embodiment has three edges 28 other than the one juxtaposed with the light source 35. These edges 28 are hot pressed to form a plurality of narrow ribs arranged in parallel with the layer 27 and projection rearwardly therefrom. The front surface diffusion layer 27 is laid on the margin reflection layers 30 which are integral with the rear surface reflection layer 29 and the peripheral edge reflection layer 31 and bonded thereto by high frequency welding to form a frame-like holder.

The edge light panel 21 is then inserted into the frame-like holder with interposition of small thin spacers 33 arranged at certain spots of its front and rear surfaces in such a manner that the irregular reflection member 23 faces the rear surface reflection layer 29 so that the edge light panel 21 is sandwiched between the rear surface reflection layer 29 and the front surface diffusion layer 27 with narrow gaps 34 formed therebetween. Then, the primary light source 35 fits in the primary light source reflection layer 32.

It is respectfully submitted that Murase, et al. reference fails to suggest, disclose, or render obvious the structure which the Applicant regards as the invention.

Specifically, (A). in Murase, et al., the front and rear panels 27 and 29 are individual separated members which are laid one on another and bonded each to the

other at the peripheral edges thereof. A frame-like holder thus created, has a cavity to which the panel 21 is received. The Murase, et al. structure thus represents a sandwich-like structure in which two layers are laid one on another and are bonded to form seams along the periphery thereof and to form therebetween a cavity in which the central portion 21 is received.

(B). The Murase, et al. Patent thus fails to suggest, disclose, or render obvious that the frame-like holder is formed of a single piece foldable member which is folded to form a box-like structure with a receiving cavity therein.

In contradistinction to Murase, et al., in the present invention, the rectangularly-shaped single-piece foldable member, best shown in Figs. 4 and 5, has four areas, e.g., 212, 213, 211, and 214 which are integrally connected each to the other due to the fact that the rectangularly-shaped folding member is a single piece member. When folded along the sides of the areas 212, 213, 211, and 214, the rectangularly shaped one-piece folding member forms a seamless box-like structure best shown in Fig. 3 with the receiving cavity 25 into which a light guide panel 20 is slid and contained therein. By forming the box-like structure from a foldable single piece rectangularly-shaped member, the present invention permits to provide for ease of manufacturing of the box-like reflection diffusion structure for receiving the light guide plate therein which allows to reduce the manufacturing costs associated with the production of the liquid crystal displays overall.

In Murase, et al. Patent, in contrast to the present invention, the front and rear panels 27 and 29, respectively, are pre-formed to have peripheral edge reflection layers 31 on the rear surface reflection layer 29 and rear surface reflection layers 28 on the front surface diffusion layer 27. The panels 27 and 29 are brought together, aligned and bonded by frequency welding along the periphery of the reflection layer 29 and diffusion layer 27.

While in order to form a box-like diffusion reflection structure of the present invention, the foldable single piece rectangularly-shaped member merely has to be folded along the respective sides thereof, thus forming a seamless box-like structure.

(C). Further, referring to Murase, et al., it is not really clear how the edge light panel 21 is to be received between the rear surface reflection layer 29 and front surface diffusion layer 27 when they are bonded together. Indeed, since three peripheral edges of each panel 29 and 28 are bonded together, there is only one edge through which the panel 21 can be inserted between the layers 29 and 27, which is the edge at which a light source reflection layer 32 is positioned. However, since the light source reflection layer 32 is actuadely folded up from the rear surface reflection layer 29, this arrangement creates an unwanted obstacle for the edge light panel 21 to be slid between the rear surface reflection layer 29 and the front surface diffusion layer 27. Therefore, Murase, et al. edge light panel device prevents from a convenient insertion of the panel 21 in the receiving cavity formed between the panels 29 and 27.

While in the present invention, the edges of the box-like structure forming an entrance to the receiving cavity 25 are free of any obstacles and the light panel 20 and the light 24 can be easily entered in the receiving cavity 25 through the edges of the box-like structure. The reflection members 26 are designed in such a way as not to impede easy entrance of the panel 20 into the box-like structure. They are either integral with the box-like structure and are folded up as in the arrangement shown in Figs. 3 and 5 after the light guide panel 20 is within the receiving cavity 25 or are placed on the edges of the cavity 25 after the light guide panel 20 has been entered into the cavity 25.

Claim 1 as amended, clearly emphasizes these distinguishing features of the present invention. Specifically, Claim 1 includes the following limitations:

a foldable single piece member having first, second, third, and fourth portions thereof, said second portion being integrally connected to said first portion, said third portion being integrally connected to said second portion, and said fourth portion being integrally connected to the third portion,

said foldable single piece member being folded along the opposing sides of said first, second, third, and fourth portions to form a box-like structure, wherein a left wall of the box-like structure coincides with the first portion, a right wall of said box-like structure coincides with the second portion, a bottom wall of the box-like structure coincides with the first portion, and a top wall of the box-like structure coincides with the third portion of the foldable single piece member.

Murase, et al. Patent fails to suggest, disclose, or render obvious these features of the present invention which are now clearly emphasized in the Claim 1. As the reference fails to suggest each and every element of the invention, as now presented in Claim 1, this reference cannot anticipate this invention. Therefore, Claim 1, as amended, is believed to contain the allowable subject matter; and the same is respectfully urged in view of the Murase, et al. patent.

Claims 3, 5, and 7-9 have been amended to improve the language thereof and to further distinguish the present invention over the cited prior art, as well as to follow the suggestions of the Examiner in view of the objection and 35 U.S.C. § 112, second paragraph, rejection made to the Claims.

Claims 2-9 are dependent on Independent Claim 1. It is believed that these Claims 2-9 each add further limitations that are patentably distinct in addition to being dependent upon what is now believed to be patentable base Claim; and therefore, allowable for at least the same reasons.

MR2349-1189

Application Serial No. 10/736,030

Responsive to Official Action dated 29 June 2005

For all of the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

FOR: ROSENBERG KLEIN & LEE



David I. Klein  
Registration #33,253

Dated: 23 Sept. 2005

3458 Ellicott Center Drive, Suite 101  
Ellicott City, MD 21043  
(410) 465-6678  
Customer No. 04586